
SHELBY COUNTY

(Shelby County Water Service Area Map)

- Estimated 1999 population of 29,500--90% on public water
- Estimated 2020 population of 37,400--94% on public water
- 500 miles of water lines, with plans for 70 additional miles
- Estimated funding needs for public water 2000-2005:\$5,832,000
- Estimated funding needs for public water 2006-2020:\$403,000

Shelby County had an estimated population of 29,543 (12,053 households) in 1999 with a projected population of 37,431 (16,186 households) in 2020. Public water is provided to about 90 percent of the county's residents. In areas of the county not served by public water, about 1/3 of the households rely on private domestic wells and the remainder rely on other sources. About 635 households will be added to public water service through new line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	in \$1000
SHELBY								-
West Shelby Water District	44	214	2,240					2,240
U.S. 60 Water District	12	81	503	558	1,375			2,436
Shelbyville Municipal	2	5	140					140
North Shelby Water District	4	16	135	881				1,016
SHELBY COUNTY TOTAL	62	316	3,018	1,439	1,375			5,832

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
SHELBY								-
North Shelby Water District	7	317	403					403
SHELBY COUNTY TOTAL	7	317	403	-	-			403

PUBLIC WATER SYSTEMS

Residents of Shelby County are served by 4 public water systems: 1 municipality, Shelbyville Municipal Water; and 3 water districts, U.S. 60 Water District, North Shelby Water District, and West Shelby Water District. Portions of the county are also served by the

WATER SERVICE AREAS

SHELBY COUNTY

Kentucky

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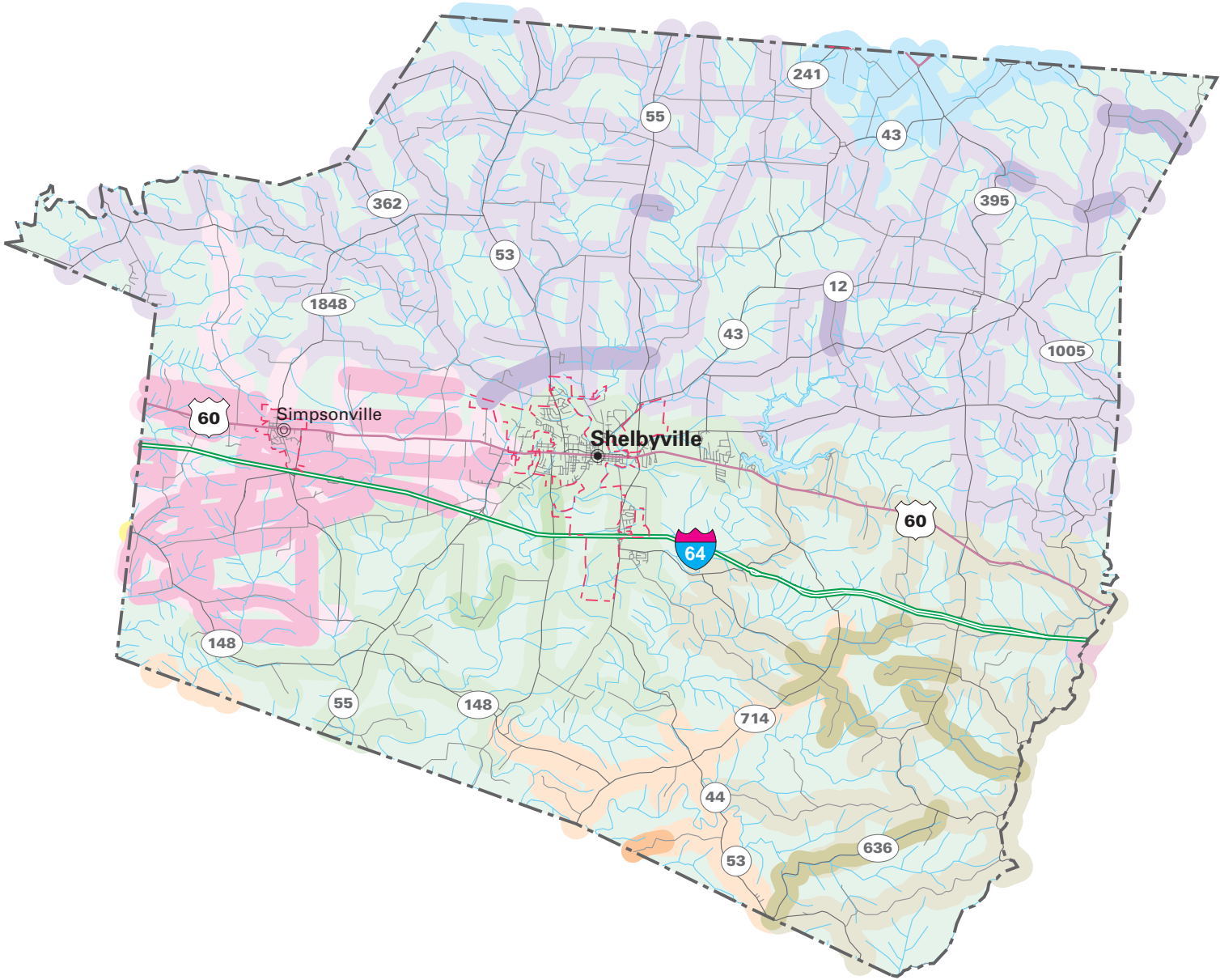
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WATER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		WEST SHELBY WATER DISTRICT
		U S 60 WATER DISTRICT
		TAYLORSVILLE WATER WORKS
		SHELBYVILLE WATER AND SEWER COMMISSION
		NORTH SHELBY WATER DISTRICT
		LOUISVILLE WATER COMPANY
		HENRY COUNTY WATER DISTRICT #2
		FARMDALE WATER DISTRICT

Farmdale Water District, Henry County Water District #2, and Taylorsville Municipal Water.

US 60 WATER DISTRICT

PWSID: 1060436
System Type:..... COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):..... 0.00
Percent Daily Average Production:..... 0.00
Total Tank Storage Capacity (gallons): 385,000.00
Total Service Connections: 1,477.00
Number of Employees:..... 6.00
Treatment Operator Class:2D
Distribution Operator Class:
Customer Rate for 1,000 Gallons:..... 5.53
O/M costs 1997:..... 260,692.00
O/M costs per Service Connection: 179.54
Net Revenue 1997:..... 63,623.00
Total Water Produced 1997 (gallons):..... 0.00
Water Sold 1997 (gallons):..... 90,773,000.00
Unaccounted-for Water 1997 (%): 17.74

U.S. 60 Water District (U.S. 60 W.D) mainly serves customers in the southern portion of Shelby County, but also has customers in Spencer, Franklin, and Anderson. This system is currently has a total of 1,456 residential connections and 21 commercial. Their water source is from Frankfort Electric & Water. The annual residential usage is 77.3 million gallons. Total annual water sold is 83 million gallons. U.S. 60 W.D. has 3 tanks with total storage capacity of 385,000 gallons. There will be some line extensions but only to connect existing lines in order to increase flow and pressure. This water district serves a rural area, and overall this system appears to be well prepared for any future needs.

NORTH SHELBY WATER DISTRICT

PWSID: 1060324
System Type:..... COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source: LOUISVILLE WATER COMPANY
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):..... 0.00
Percent Daily Average Production:..... 0.00

Total Tank Storage Capacity (gallons):	825,000.00
Total Service Connections:	3,185.00
Number of Employees:.....	6.00
Treatment Operator Class:	2D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:.....	4.00
O/M costs 1997:.....	877,686.00
O/M costs per Service Connection:	257.08
Net Revenue 1997:	138,945.00
Total Water Produced 1997 (gallons):.....	0.00
Water Sold 1997 (gallons):.....	307,331,000.00
Unaccounted-for Water 1997 (%):	18.30

North Shelby Water District is multi-county by nature. They have customers in 5 counties: Shelby, Henry, Jefferson, Franklin, and Oldham. Their majority of service is in the upper region of Shelby County or north of U.S.60. Presently, the total population served by N.S.W.D. is 19,140; with a total annual volume of residential usage at 207,228,900 gallons. This system purchases water from 4 sources (Shelbyville Municipal, Louisville Water Company, West Shelby Water District, and Frankfort Electric & Water Company). N.S.W.D. has 5 tanks with a total storage capacity of 825,000 gallons. There are 6 full-time employees; 2 of which are certified operators. This system is well managed and service gaps are non-existent. Only a few large farms and rural homes are without water service, but wells and hauled water seem to be adequate.

WEST SHELBY WATER DISTRICT

PWSID:	1060457
System Type:.....	COMMUNITY
Owner Type:	WATER DISTRICT
Surface Source:	
Purchase Source:	
Well Source:	
Sells Water to:	NORTH SHELBY WATER DISTRICT
Treatment Plant Capacity (MGD):.....	0.00
Percent Daily Average Production:.....	0.00
Total Tank Storage Capacity (gallons):	200,000.00
Total Service Connections:	1,139.00
Number of Employees:.....	3.00
Treatment Operator Class:	2D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:.....	4.23
O/M costs 1997:.....	396,974.00
O/M costs per Service Connection:	375.92
Net Revenue 1997:	150,066.00
Total Water Produced 1997 (gallons):.....	0.00
Water Sold 1997 (gallons):.....	182,127,000.00
Unaccounted-for Water 1997 (%):	7.29

West Shelby Water District (W.S.W.D) distributes water to Southwest Shelby County and a very small portion of Jefferson County. This system is supplied water from Louisville Water Company and Shelbyville Water. The ground sources of the two suppliers are the Ohio River and Guist Creek Lake. The W.S.W.D. has 2 tanks with total storage capacity of 950,000 gallons. There are 956 residential customers in Shelby County and 66 in Jefferson County. Population growth in this portion of Shelby County is projected to be 100 new households per year for the next 5 years. The water district has 3 full-time employees (1 is a certified operator).

The majority of their water supply comes from the Louisville Water Company and there are plans for upgrading the existing transmission line to meet the future needs of this area. In the next 5 years it will essential for the W.S.W.D. to extend and expand their existing lines to accommodate the rapid industrial, commercial, and residential growth around the City of Simpsonville.

SHELBYVILLE WATER AND SEWER COMMISSION

PWSID: 1060394
 System Type: COMMUNITY
 Owner Type: MUNICIPAL
 Surface Source: GUIST CREEK LAKE
 Purchase Source:
 Well Source:
 Sells Water to: NORTH SHELBY WATER DISTRICT
 Treatment Plant Capacity (MGD): 6.00
 Percent Daily Average Production: 71.00
 Total Tank Storage Capacity (gallons): 2,000,000.00
 Total Service Connections: 5,570.00
 Number of Employees: 23.00
 Treatment Operator Class: 3D
 Distribution Operator Class: 4A
 Customer Rate for 1,000 Gallons: Not available
 O/M costs 1997: Not available
 O/M costs per Service Connection: Not available
 Net Revenue 1997: Not available
 Total Water Produced 1997 (gallons): Not available
 Water Sold 1997 (gallons): Not available
 Unaccounted-for Water 1997 (%): Not available

The Shelbyville Water & Sewer Commission is one of the largest systems in the KIPDA region with the city of Shelbyville making up the majority of residential usage in this county. This system's surface source of water is Guist Creek Lake that is located in Shelbyville. This system has well managed treatment plant that has a treatment capacity of 6 million gallons per day. They have 4 tanks with a total storage capacity of 2 million gallons. There are currently 5,020 households being served and over 500 commercial connections. This water system also is contracted to sell finished water (wholesale) to West Shelby County Water District and North Shelby Water District. There are 23 full-time employees of which 7 are certified operators. At the present, Shelbyville Water is selling 814,493,000 gallons annually (384,287,625 is residential). The superintendent has been communicating with the Louisville Water Company about the plausibility purchasing water from the L.W.C. for future needs within Shelby County.

PRIVATE DOMESTIC SYSTEMS

About 2,800 residents of Shelby County rely on private domestic water supplies: 900 on wells and 1,900 on other sources.

Ground-water resources in Shelby County are limited. Wells located in the larger valley bottoms throughout the county will produce enough water for a domestic supply except during dry weather. In the upland area Shelby County which encompasses approximately 80% of the county, most drilled wells will not produce enough water for a dependable domestic supply except along drainage lines which may produce enough water except during dry weather.

Throughout the county ground water is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.